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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Application Number	10/720,459
Filing Date	11/24/2003
First Named Inventor	Eric W. Triplett et al.
Group Art Unit	1616
Examiner Name	S. Clardy
Attorney Docket No.	WIS4987P0321US

Sheet 1 of 4

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication of Cited Document MM-DD-YYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
IM		4,828,600		McCabe	May 9, 1989	
		4,875,921		Paa	Oct. 24, 1989	
		5,552,138		Handelsman et al.	Sept. 3, 1996	
		4,562,663		Keith M. Redenbaugh	Jan. 7, 1986	
		5,451,241		Carlson et al.	Sept. 19, 1995	
		4,149,869		John M. Lloyd	April 17, 1979	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>4</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
IM			EP 1036492A1		Kretzschmar	Sept. 20, 2000		
IM			WO 98/57543	PCT		Dec. 23, 1998		
IM			WO 98/30100	PCT		July 16, 1998		
Examiner Signature		/Irene Marx/				Date Considered	08/21/2006	

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standards ST.16, if possible. <sup>6</sup> Applicant is to place a checkmark here if English language Translation is attached.

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
IM		G. Hoflich et al., "Growth stimulation of pea after inoculation with associative bacteria." Microbiol Research 149:99-104 (1994).	
		R. Remus et al., "Colonization behaviour of two enterobacterial strains on cereals." Biology and Fertility of Soils, (Mar 2000) 30:550-557.	
		R. Remus et al., "Colonization behaviour of two enterobacterial strains on cereals." - Biology and Fertility of Soils, March, 2000 Vol. 30, Page 550-557. (Abstract).	
		V. Arangarasan et al., "Inoculation effects of diazotrophs and phosphobacteria on rice." Indian Journal of Microbiology, (1998) 38:111-112 (Abstract).	
		Vld, Baldini et al., "Inoculation of rice plants with the endophytic diazotrophs <i>Herbaspirillum seropedicae</i> and <i>Burkholderia</i> spp." Biology of Fertility and Soils, (2000) 30:485-491.	
		F. Bastian et al., "Production of indole-3-acetic acid and gibberellins A1 and A3 by <i>Acetobacter diazotrophicus</i> and <i>Herbaspirillum seropedicae</i> in chemically-defined culture media." Plant Growth Regulation, (Jan. 1998) 24:7-11 (Abstract).	
		A.K. Goel et al., "Use of biofertilizers: Potential, constraints and future strategies- a review." International Journal of Tropical Agriculture, (Mar-Dec 1999) 17:1-18 (Abstract).	
		F. Bastian et al., "Inoculation with <i>Acetobacter diazotrophicus</i> Increase Glucose and Fructose Content in Shoots of <i>Sorghum bicolor</i> (L.) Monech" Symbiosis (1999), 27(2), 147-156.	
		G. Kirchhof et al., "Molecular assay to identify <i>Acetobacter diazotrophicus</i> and detect its occurrence in plant tissues", Canadian Journal of Microbiology (1998), 44(1), 12-19	
		M. Sevilla et al., "Contributions of the Bacterial Endophyte <i>Acetobacter diazotrophicus</i> to Sugarcane Nutrition: A Preliminary Study" Symbiosis, (1998) Vol. 25, No. 1-3, pp. 181-191.	
		E. Karpati et al., "Study of wheat and rice cultivars in association with nitrogen-fixing bacteria." NoveNytermeles, (2000) 49:233-244 (Abstract).	
		B. Rethati et al., "Characterization of Hungarian rice cultivars in nitrogen fixing associations with bacteria." Cereal Research Communications, (2000) 28:9-16 (Abstract)	
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IM		P.J. Riggs et al., "Enhanced maize productivity by inoculation with diazotrophic bacteria." Australian Journal of Plant Physiology, (2001) 28:829-836 (Abstract)	
		E. Triplett et al., "Diazotrophic endophytes: Progress and prospects for nitrogen fixation in monocots." Plant and Soil, (1996) 186:29-38 (Abstract).	
		European Patent Search Report (EP1036492 A1). <i>date unavailable</i>	
		PCT Search Report (PCT/US01/46524). <i>date unavailable</i>	
		European Patent Search Report (EP 01 99 6114). <i>date unavailable</i>	
		P.J. Riggs et al., "Enhanced maize productivity by inoculation with diazotrophic bacteria" CSIRO publishing - Functional Plant Biology & 8 <sup>th</sup> International Symposium on Nitrogen Fixation with Non-legumes, 3 December 2000 (2000-12-03), Sydney, NSW, AU & Australian Journal of Plant Physiology, Vol. 28, No. 9, 2001, pages 829-836. (T)	
		M.K. Chelius et al., "Immunolocalization of Dinitrogenase Reductase Produced by Klebsiella pneumoniae in Association with Zea mays L." Applied and Environmental Microbiology, vol. 66, No. 2, February 2000 (2000-02), pages 783-787.	
		M.E. Will et al., "Interaction of Rhizosphere Bacteria, Fertilizer, and Vesicular-Arbuscular Mycorrhizal Fungi with Sea Oats" Applied and Environmental Microbiology, Vol. 56, No. 7, July 1990 (1990-07), pages 2073-2079.	
		Hassouna Mohammed Gamal et al., "Increased yields of alfalfa (Medicago sativa) inoculated with N-2-fixing bacteria and cultivated in a calcareous soil of northwestern Egypt" Biosciences Information Service, Philadelphia, PA US 1994 & Arid Soil Research and Rehabilitation, Vol. 8, No. 4, 1994, pages 389-393. (Abstract).	
		Sengupta B et al., "Nitrogen Fixation in the Phyllosphere of Tropical Plants Occurrence of Phyllosphere Nitrogen Fixing Microorganisms in Eastern India and Their Utility for the Growth and Nitrogen Nutrition of Host Plants" Biosciences Information Service, Philadelphia, PA, US, 1981 and Annals of Botany (London) vol. 48, No. 5, 1981, pages 705-716 (Abstract).	
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IM		Nandi A. S. et al., "Utility of Phyllosphere Nitrogen Fixing Microorganisms in the Improvement of Growth of Some Vegetables" Biosciences Information Service, Philadelphia, PA, US, 1983, & Journal of Horticultural Science, Vol. 58, No. 4, 1983, pages 547-554. (Abstract).	
		Nandi A. S. et al., "Utility of Some Nitrogen Fixing Microorganisms in the Phyllosphere of Crop Plants" Biosciences Information Service, Philadelphia, PA, US, 1981 & Plant and Soil, Vol. 63, No. 3, 1981, pages 465-476 (Abstract).	
		Samanta R et al., "Further Observations on the Utility of Nitrogen-Fixing Microorganisms in the Phyllosphere of Cereals" Biosciences Information and Service, Philadelphia, PA, US 1986 & Journal of Agricultural Science, vol. 107, No. 3, 1996, Pages 673-680 (Abstract).	
		Haahela K et al., "Root-Associated Enterobacter and Klebsiella in POA-Pratensis Characterization of An Iron-Scavenging System and a Substance Stimulating Root Hair Production" Biosciences Information Service, Philadelphia, PA, US 1990 & Molecular Plant-Microbe Interactions, Vol. 3, No. 6, 1990, Pages 358-365. (Abstract).	
		Derwent Publications Ltd., London, GB; Class A947, AN 1985-107708 Section Ch, Week 198518 & JP 60 051684A 23 March 1985 (Abstract).	
		M. Chelius et al., "Diazotrophic Endophytes Associated with Maize", pages 779-791 "Prokaryotic Nitrogen Fixation: A Model System for Analyses of a Biological Process" 2000, Horizon Scientific Press, Wymondham, UK.	
		El-Khawas H et al., "Identification and quantification of auxins in culture media of Azospirillum and Klebsiella and their effect on rice roots" Biosciences Information Service, Philadelphia, PA, US & Biology and Fertility of Soils, Vol. 28, No. 4, February 1999 (1999-02), Pages 377-381. (Abstract).	
		Hassouma Mohammed Gama et al., "Biocontrol of soil-borne plant pathogens attacking cucumber (Cucumis sativus) by rhizobacteria in a semiarid environment" Biosciences Information Service Philadelphia, PA, US & Arid Soil Research and Rehabilitation, Vol. 12, No. 4, October 1998 (1998-10), Pages 345-357. (Abstract).	
		P.J. Riggs et al., "Isolation and characterization of diazotrophic endophytes from grasses and their effects on plant growth" Chemical Abstracts Service Columbus, Ohio, US & Nitrogen Fixation Global Perspectives, Proceedings of the International Congress on Nitrogen Fixation, 13 <sup>th</sup> , Hamilton, on Canada, July 2-7, 2001, Pages 263-267. (Abstract).	
		Dong Yuemei et al. "Genomic interspecies microarray hybridization: Rapid discovery of three thousand genes in the maize endophyte, Klebsiella pneumoniae 342, by microarray hybridization with Escherichia coli K-12 open reading frames" Biosciences Information Service Philadelphia, PA US April 2001 (2001-04) & Applied and Environmental Microbiology, vol. 67, no. 4, April 2001 (2001-04), pages 1911-1921. (Abstract).	
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